

IN THE CLAIMS

The following claims are presented for examination.

1. (Currently Amended) A method for transmitting wideband speech signals over a narrowband communication system, comprising:

generating a narrowband digital signal at a base station from a plurality of data packets received from a remote station, wherein the plurality of data packets carry a wideband speech signal;

puncturing the narrowband digital signal [[with]] by inserting the plurality of data packets carrying the wideband speech signal into the narrowband digital signal;

transmitting the punctured narrowband digital signal over the narrowband communication system to a second base station;

separating the narrowband digital signal from the plurality of data packets at the second base station; and

forwarding only the plurality of data packets to a second remote station.

2. (Original) The method of Claim 1, wherein the puncturing of the narrowband digital signal occurs in the least significant bits of the narrowband digital signal.

3. (Original) The method of Claim 1, further comprising disabling a plurality of in-path equipment at the first base station and the second base station.

4. (Original) The method of Claim 3, wherein the plurality of in-path equipment comprise echo cancellers.

5. (Original) The method of Claim 3, wherein the plurality of in-path equipment comprise a decoding portion of a vocoder.

6. (Original) The method of Claim 1, further comprising the step of negotiating for tandem-free operations between the first base station and the second base station before the step of puncturing.

7. (Original) The method of Claim 1, wherein the narrowband digital signal is a pulse code modulated (PCM) signal.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Currently Amended) A system for transmitting wideband speech signals over a narrowband communication network, comprising:

means for generating a narrowband digital signal at a base station from a plurality of data packets received from a remote station, wherein the plurality of data packets carry a wideband speech signal;

means for puncturing the narrowband digital signal ~~[[with]]~~ by inserting the plurality of data packets carrying the wideband speech signal into the narrowband digital signal;

means for transmitting the punctured narrowband digital signal over the narrowband communication network to a second base station;

means for separating the narrowband digital signal from the plurality of data packets at the second base station; and

means for forwarding the plurality of data packets to a second remote station.

15. (Cancelled)

16. (Cancelled)

17. (Currently Amended) ~~The method of claim 1~~

A method for transmitting wideband speech signals over a narrowband communication system, comprising:

generating a narrowband digital signal at a base station from a plurality of data packets received from a remote station, wherein the plurality of data packets carry a wideband speech signal;

puncturing the narrowband digital signal with the plurality of data packets carrying the wideband speech signal;

transmitting the punctured narrowband digital signal over the narrowband communication system to a second base station;

separating the narrowband digital signal from the plurality of data packets at the second base station; and

forwarding only the plurality of data packets to a second remote station,

wherein generating the narrowband digital signal comprises:

decoding the plurality of data packets to recover the wideband speech signal;

generating a narrowband speech signal from the wideband speech signal; and

digitizing the narrowband speech signal.

18. (Previously Presented) The method of claim 1, wherein the wideband speech signal includes frequency components between 3400 Hz and 7000Hz.

19. (Previously Presented) The method of claim 1, wherein the wideband speech signal comprises an acoustic signal in the range of 50 Hz to 7000 Hz.

20. (Previously Presented) The method of claim 1, further comprising discarding bits comprising the narrowband digital signal.

21. (Previously Presented) The system of Claim 14, wherein the means for puncturing the narrowband digital signal uses the least significant bits of the narrowband digital signal.
22. (Previously Presented) The system of Claim 14, further comprising means for disabling a plurality of in-path equipment at the first base station and the second base station.
23. (Previously Presented) The system of Claim 22, wherein the plurality of in-path equipment comprise echo cancellers.
24. (Previously Presented) The system of Claim 22, wherein the plurality of in-path equipment comprise a decoding portion of a vocoder.
25. (Previously Presented) The system of Claim 14, further comprising means for negotiating for tandem-free operations between the first base station and the second base station before the means for puncturing punctures the narrowband digital signal.
26. (Previously Presented) The system of Claim 14, wherein the narrowband digital signal is a pulse code modulated (PCM) signal.
27. (Currently Amended) ~~The system of Claim 14~~
A system for transmitting wideband speech signals over a narrowband communication network, comprising:
means for generating a narrowband digital signal at a base station from a plurality of data packets received from a remote station, wherein the plurality of data packets carry a wideband speech signal;
means for puncturing the narrowband digital signal with the plurality of data packets carrying the wideband speech signal;
means for transmitting the punctured narrowband digital signal over the narrowband communication network to a second base station;

means for separating the narrowband digital signal from the plurality of data packets at the second base station; and

means for forwarding the plurality of data packets to a second remote station, wherein

means for generating the narrowband digital signal comprises:

means for decoding the plurality of data packets to recover the wideband speech signal;

means for generating a narrowband speech signal from the wideband speech signal; and

means for digitizing the narrowband speech signal.

28. (Previously Presented) The system of Claim 14, wherein the wideband speech signal includes frequency components between 3400 Hz and 7000Hz.

29. (Previously Presented) The system of Claim 14, wherein the wideband speech signal comprises an acoustic signal in the range of 50 Hz to 7000 Hz.

30. (Previously Presented) The system of Claim 14, further comprising means for discarding bits comprising the narrowband digital signal.

31. (New) A method of creating a narrowband digital signal containing data packets carrying a wideband speech signal in a communications system, comprising:

generating said narrowband digital signal having 8-bit pulse code modulated (PCM) symbols; and

puncturing the narrowband digital signal by inserting, in a psuedo-random basis, a plurality of data packets containing said wideband speech signal into the least significant bits (LSB) of a mantissa value portion of the PCM symbols.

32. (New) The method recited in claim 30, further comprising:
receiving the punctured narrowband digital signal at a base station.

33. (New) The method recited in claim 32, wherein upon receiving the punctured narrowband signal, the base station stops any conversion of PCM symbols into data packets and passes the punctured narrowband signal to a target terminal.
34. (New) The method recited in Claim 30, wherein the wideband speech signal includes frequency components between 3400 Hz and 7000Hz.
35. (New) The method recited in Claim 30, wherein the wideband speech signal comprises an acoustic signal in the range of 50 Hz to 7000 Hz.
36. (New) The method recited in Claim 30, wherein the puncturing of the narrowband signal comprises discarding bits contained in the narrowband digital signal.
37. (New) A method of encoding wideband speech signal information for compatibility with a narrowband communication system, comprising:
generating a narrowband digital signal at a base station from a plurality of data packets received from a remote station, wherein the plurality of data packets carry a wideband speech signal; and
puncturing the narrowband digital signal by inserting the plurality of data packets carrying the wideband speech signal into the narrowband digital signal.
38. (New) The method of Claim 37, wherein the puncturing of the narrowband digital signal occurs in the least significant bits of the narrowband digital signal.
39. (New) The method of Claim 37, further comprising disabling a plurality of in-path equipment at the base station.
40. (New) The method of Claim 39, wherein the plurality of in-path equipment comprises echo cancellers.

41. (New) The method of Claim 39 wherein the plurality of in-path equipment comprises a decoding portion of a vocoder.
42. (New) The method of Claim 37, further comprising:
negotiating for tandem-free operations between the first base station and the second base station before the operation of puncturing.
43. (New) The method of Claim 37, wherein the narrowband digital signal is a pulse code modulated (PCM) signal.